What is claimed is:

1. A multi-service-class definition type ATM switch comprising:

an ATM buffer device which comprises a buffer section consisting of
a plurality of buffers, each of which is capable of defining a service class,
and a cell reading section for reading data from the buffer section;

a data input/output device which comprises a data input section for inputting data from external, a data output section for outputting the data, and a first data transceiver section for performing reception and transmission with respect to the data; and

a data processing device which comprises a second data transceiver for performing reception and transmission of data in connection with the first data transceiver section, a data analysis section for analyzing the data given from the second data transceiver section, and a data reading/setting section.

- 2. A multi-service-class definition type ATM switch according to claim
 1 wherein the data input/output device is capable of inputting and
 outputting data regarding a service class such as a service category and a
 QOS class.
- 3. A multi-service-class definition type ATM switch according to claim 1 or 2 wherein the data processing device performs processing regarding reception, transmission and analysis on data regarding a service class, a buffer number and a request type, so that reading and setting of the data

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- 5 can be made with respect to a prescribed buffer selected from the buffer section in response to a result of the processing.
 - 4. A multi-service-class definition type ATM switch according to any one of claims 1 to 3 wherein the data processing device is capable of renewing and storing new data regarding a new service category and a new QOS class.
 - 5. A service class defining method for defining a service class for each of a plurality of buffers provided within an ATM switch, comprising the steps of:

inputting data with regard to a service class containing a service category and a QOS class;

detecting a mode, which is one of a data setting mode, a data read mode and a data renewal mode, on the basis of a request type designated by the data;

defining a buffer, within the plurality of buffers, to be related to the service class of the data;

performing an operation on the data in association with the buffer in response to the mode; and

outputting content of the data.

6. A service class defining method for defining a service class for each of a plurality of buffers provided within an ATM switch, comprising the steps of:

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inputting data with regard to a service class containing a service category and a QOS class;

setting the data to a buffer whose buffer number is designated by the data within the plurality of buffers when a request type of the data corresponds to a data setting mode; and

outputting content of the data set to the buffer.

7. A service class defining method for defining a service class for each of a plurality of buffers provided within an ATM switch, comprising the steps of:

detecting a buffer number with respect to a service class, containing a service category and a QOS class, requested by a user;

reading data from a buffer, corresponding to the buffer number, within the plurality of buffers; and

dutputting content of the data read from the buffer.

8. A service class defining method for defining a service class for each of a plurality of buffers provided within an ATM switch, comprising the steps of:

detecting a service class, containing a service category and a QOS

5 class, which is designated by a user;

renewing data with respect to the service class; and outputting content of the renewed data.

outputting content of the i